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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,822

04/17/2006

Ian Bradley Nielsen

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EXAMINER

UPTON, CHRISTOPHER

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

10/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,822	Applicant(s) NIELSEN, IAN BRADLEY	
	Examiner Christopher Upton	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-47 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 28-35, 40-42 and 46 is/are rejected.
- 7) ☒ Claim(s) 36-39, 43-45 and 47 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/22/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 28, 29 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Nixon.

Nixon discloses a dome shaped suction head with an upper outlet and an air conduit for displacing solids, as claimed.

3. Claims 28, 29 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Pentz.

Pentz discloses an air lift suction system for removing solids, as claimed.

4. Claims 28, 29, 32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Forrest or Wade.

Forrest and Wade disclose airlift suction systems for removing solids as claimed.

With respect to claim 33, it is submitted that the scrapers form the skids recited.

5. Claims 28-32, 34, 35, 40-42 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips.

Phillips discloses an airlift suction system for removing solids from the bottom of a body of water having an elongated air diffuser (see figure 3), which delivers the solids to a ship mounted, and therefore floating container that surrounds the collector, with a telescopic tube allowing the head of the collector to be adjusted, as claimed.

6. Claims 28, 32, 34, 35, 40-42 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Kauser.

Kauser discloses an airlift suction system for removing solids from the bottom of a body of water, which delivers the solids to a ship mounted, and therefore floating container that surrounds the collector, with a hoist for allowing the head of the collector to be adjusted, as claimed.

7. Claims 36 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The combination of an apparatus for removing solids from the bottom of a reservoir having a hollow suction head with a means for introducing air, as recited in claim 28 and a buoyantly supported collection chamber as recited in claim 34, wherein the chamber is circular in cross section and has a guide means for directing the entrained liquids and solids tangentially patentably distinguishes over the prior art of record.

8. Claims 37, 38 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The combination of a method or apparatus for removing solids from the bottom of a reservoir having a hollow suction head with a means for introducing air and a buoyantly supported collection chamber, wherein the chamber additionally has a means for collecting floating solids patentably distinguishes over the prior art of record. A floating collector for floating materials having a tangential inlet is exemplified by Pichon, but there is no suggestion to use such a device in combination with the airlift suction heads for collection of solids from the bottom of a reservoir disclosed by Phillips or Kauser.

9. Claim 43 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The combination of an apparatus for removing solids from the bottom of a reservoir having a hollow suction head with a means for introducing air and having skids at the opposite ends; and a buoyantly supported collection chamber, wherein the collector is connected to the suction head by parallel link arms patentably distinguishes over the prior art of record. While such a link arm system is shown by Kauser, there is no motivation to add skids to the suction head of Kauser.

10. Claims 44 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The combination of an apparatus for removing solids from the bottom of a reservoir having a hollow suction head with a means for introducing air and a buoyantly supported collection chamber, wherein the apparatus is coupled to a winch and cable patentably distinguishes over the prior art of record. While such winch and cable systems are known, as exemplified by Forrest, Coudriet, Keller and Nilsmar, these are for suction devices which are not connected to floating collectors, but are coupled to lines for removing the material out of the reservoir, not to a floating collector, and there is no motivation to combine such a system with the free moving vessels of Phillips or Kauser.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other references of interest include Dulak, Cherney and Vander Schriek.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Upton whose telephone number is 571-272-1169. The examiner can normally be reached on 8:30-6:00, off every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher Upton/
Primary Examiner, Art Unit 1797

Christopher Upton
Primary Examiner
Art Unit 1797